

EXHIBIT 16

WILEY ELECTRICAL AND ELECTRONICS ENGINEERING DICTIONARY

Steven M. Kaplan
Lexicographer



IEEE PRESS



A JOHN WILEY & SONS, INC., PUBLICATION

ENGI

Copyright © 2004 by John Wiley & Sons, Inc. All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.
Published simultaneously in Canada.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, 978-750-8400, fax 978-646-8600, or on the web at www.copyright.com. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representation or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

For general information on our other products and services please contact our Customer Care Department within the U.S. at 877-762-2974, outside the U.S. at 317-572-3993 or fax 317-572-4002.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print, however, may not be available in electronic format.

Library of Congress Cataloging-in-Publication Data is available.

Kaplan, Steven M.

Wiley Electrical and Electronics Engineering Dictionary

ISBN 0-471-40224-9

Printed in the United States of America.

10 9 8 7 6 5 4 3 2 1

compatible systems

compatible systems Two or more systems which work properly together without modification.

compensated amplifier A wideband amplifier whose frequency range is increased through the proper selection of circuit components and characteristics.

compensated semiconductor A semiconductor with two types of impurities or imperfections, in which the electrical effects of one type of impurity or imperfection partially cancels the other. For instance, a donor impurity partly annuls the electrical effects of an acceptor impurity.

compensated volume control In an audio system, a volume control which incorporates a circuit that boosts low frequencies when listening at low-volume settings. This compensates for the lower auditory response humans have under these circumstances, thus making the sound more natural. Such a control may also boost high frequencies. Also called **loudness control** (1).

compensating capacitor Also called **compensation capacitor**. 1. In a radio direction finder, a variable capacitor used to improve the accuracy of direction indication. Also called **balancing capacitor**. 2. A capacitor which is utilized to compensate for other components in a circuit. For instance, a temperature-compensating capacitor.

compensating filter A selective filter which is utilized to compensate for a deficiency, irregularity, or otherwise undesirable quantity. Also called **compensation filter**.

compensating leads An additional pair of leads, which are used alongside the working leads of an instrument, to compensate for environmental effects such as changes in temperature. Used, for instance, in a resistance thermometer. Also called **compensation leads**.

compensation The offsetting, counterbalancing, neutralizing, or stabilizing of a component, circuit, device, piece of equipment, or system. Compensation may be used, for instance, to make up for system deficiencies, environmental complications, or for adjusting equipment to meet specific needs.

compensation capacitor Same as **compensating capacitor**.

compensation filter Same as **compensating filter**.

compensation leads Same as **compensating leads**.

compensation signal A signal recorded on a magnetic tape track, which enables electrically correcting errors in tape speed during playback.

compensator A component, circuit, device, or piece of equipment which serves to offset, counterbalance, neutralize, or stabilize. Used, for instance, to make up for system deficiencies, environmental complications, or for adjustments made to meet specific needs.

competitive local exchange carrier A communications entity which offers local telephone service. Such an entity may offer other services, such as long-distance calling, Internet access, and so on. Its abbreviation is CLEC.

compilation Also called **compiling**. 1. The process of taking the source code of a program written in a high-level language and translating it into machine language. 2. The process of taking a set of high-level language statements and translating them into a lower-level representation.

compilation error 1. An error occurring during compilation. 2. An error detected during compilation.

compilation time Same as **compile time**.

compile 1. To take the source code of a program written in a high-level language, and translate it into machine language using **compiler** (1). 2. To take a set of high-level language statements, and translate them into a lower-level representation using a **compiler** (2).

compile time The time it takes to **compile**. Also called **compilation time**.

130 complementary metal-oxide semiconductor technology

compile-time error An error that occurs while a program is being compiled, as opposed to a **runtime error**, which occurs while a program is being executed.

compiled language A computer programming language in which all the code is translated into machine language before being executed. This contrasts with an **interpreted language**, in which each statement is translated then executed, followed by the next statement, and so on. LISP is a programming language that has both compiler and interpreter versions.

compiler Also called **compiler program**, or **compiling program**. 1. A computer program which takes the source code of a program written in a high-level language and translates it into machine language. When using a compiler, all the code is translated before any program instructions are executed, while an **interpreter** translates and executes each statement or instruction before moving on to the next. 2. A computer program which takes a set of high-level language statements and translates them into a lower-level representation.

compiler program Same as **compiler**.

compiling Same as **compilation**.

compiling error 1. An error occurring during **compilation**. 2. An error detected during **compilation**.

compiling program Same as **compiler**.

complement The numerical result obtained when a number is subtracted from the radix, which is the number of digits used in a numbering system. For instance, the complement of 6 in the decimal number system is 4: $(10 - 6) = 4$. The complement of a number in the binary number system is the other: 1 is the complement of 0, and 0 is the complement of 1. Used in computers, for instance, to represent negative numbers. Also called **true complement**, or **radix complement**.

complement number system A system of handling numbers in which arithmetic operations are performed on the complements of numbers. Used, for instance, to handle negative numbers in a simpler manner.

complementary 1. Mutually completing. 2. Compensating for mutual deficiencies. 3. In semiconductors, having components of opposite polarities working together. For instance, incorporating pnp and npn transistors on the same substrate.

complementary colors Two colors, which when combined in the appropriate proportions, yield an achromatic color. For instance, red and green.

complementary metal-oxide semiconductor Same as **CMOS**.

complementary metal-oxide semiconductor-based Same as **CMOS-based**.

complementary metal-oxide semiconductor battery Same as **CMOS battery**.

complementary metal-oxide semiconductor chip Same as **CMOS chip**.

complementary metal-oxide semiconductor device Same as **CMOS device**.

complementary metal-oxide semiconductor memory Same as **CMOS memory**.

complementary metal-oxide semiconductor RAM Same as **CMOS RAM**.

complementary metal-oxide semiconductor random-access memory Same as **CMOS RAM**.

complementary metal-oxide semiconductor setup Same as **CMOS setup**.

complementary metal-oxide semiconductor technology Same as **CMOS technology**.